

WHAT IS CLAIMED IS:

1. A method of assembling a tire and a wheel rim, comprising the steps of:

(1) determining a Radial Runout (RRO) value $Wr1$ (unit: mm) in a primary component of the RRO of the wheel rim, a phase $\theta r1$ (unit: °) of a peak position thereof, an unbalance level Wub (unit: g) of a heavy point in a weight unbalance of the wheel rim, a phase θub thereof (unit: °), a radial distance L (unit: mm) of a balance weight mounting position for correcting the weight unbalance from an axis center of the wheel rim, a weight Tt (unit: mm) of the tire, and a phase αt of a light point in the weight unbalance of the tire;

(2) determining a phase θc of a correction unbalance Wc found by the following formula (1), by using the RRO value $Wr1$, the phase $\theta r1$, the unbalance level Wub , the phase θub , the distance L , the weight Tt and the phase αt determined in the preceding step; and

$$\theta c = \tan^{-1} \left[\frac{Wub \times \sin \theta ub + \{ (Wr1 \times Tt) / (2 \times L) \} \times \sin \theta r1}{Wub \times \cos \theta ub + \{ (Wr1 \times Tt) / (2 \times L) \} \times \cos \theta r1} \right] \dots (1)$$

(3) assembling the tire and the wheel rim in a state of aligning the phase θc of the correction unbalance Wc with the phase αt of the light point of the tire.